

## Original article

# Guilt, shame, and coping in Chinese adolescence: A Bayesian analysis of parental induction appeals

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### Abstract:

This study investigates how guilt-oriented and shame-oriented parental induction appeals relate to Chinese adolescents' coping responses. Using secondary data from 3,784 high school students in Shenzhen, China, selected parenting items were classified by dominant emotional appeal and analyzed with Bayesian regression models. Guilt-oriented appeals emphasized wrongdoing, parental suffering, reciprocity, or conscience, whereas shame-oriented appeals emphasized embarrassment, humiliation, public criticism, or social devaluation. The results showed limited evidence that parental induction promoted constructive behavioral change. Instead, both guilt-oriented and shame-oriented appeals were more consistently associated with avoidance, especially guilt-oriented appeals involving parental suffering, indebtedness, or unmet expectations. The findings suggest that parental induction is not a unitary practice and that its effects depend on whether adolescents experience it as a repairable moral demand or as an intrusive and self-devaluing form of control.

## 1. Introduction

### 1.1 Guilt and shame as distinct self-conscious emotions

Guilt and shame are closely related self-conscious emotions, but they are not the same psychological experience. In the broader emotion literature, guilt is typically linked to appraisals of a specific wrongdoing, harm caused to another person, or failure to meet a moral obligation, whereas shame is more closely linked to negative evaluation of the self, exposure, humiliation, and anticipated devaluation by others (Tangney et al., 1996; Tangney et al., 2007; Tracy & Robins, 2006). This distinction matters because guilt is generally more compatible with reparative motives such as apology, correction, and making amends, while shame is more likely to generate withdrawal, concealment, defensiveness, or anger when the self rather than the act is experienced as flawed

(Miceli & Castelfranchi, 2018; Tangney et al., 2007).

The distinction is especially important for developmental research because self-conscious emotions do not merely reflect internal states; they also organize how young people respond to socialization pressures. As van Eickels et al. (2025) summarize, parent-child relationships are central contexts in which shame and guilt are shaped, and dysfunctional parent-child relationships are associated more strongly with shame and maladaptive guilt than positive parent-child relationships are. In other words, whether a child experiences parental influence as behavior-focused guilt or self-focused shame is likely to matter for subsequent coping and adjustment.

### 1.2 Guilt and shame as parenting practices

These emotional distinctions matter for parenting because parental induction does not always operate through the same emotional pathway. Some parental messages highlight the child's responsibility for wrongdoing, parental suffering, or

unmet relational obligations, and are therefore more plausibly guilt-oriented (Fung & Lau, 2012; Tangney et al., 2007). Other parental messages foreground humiliation, embarrassment, denigration, or negative evaluation before others, and are therefore more plausibly shame-oriented (Cheah et al., 2015; Smetana et al., 2021). Rather than treating all such practices as one broad form of “guilt induction,” the literature increasingly suggests that parents may elicit qualitatively different emotions depending on whether they emphasize reparable misconduct or exposure of the self.

This distinction also connects directly to the literature on parental psychological control. Barber (1996) defined psychological control as parental behavior that constrains, invalidates, and manipulates children’s psychological and emotional experience, distinguishing it from more behaviorally focused forms of parental regulation. That distinction is crucial here because guilt-oriented parental messages may sometimes function as morally framed or relationally focused pressure, whereas shame-oriented messages may more directly intrude on the child’s sense of self through humiliation, public criticism, or denigration. Thus, studying guilt and shame as parenting practices is not simply a matter of labeling emotions; it is a way of clarifying different mechanisms of parental control.

### **1.3 Why guilt and shame should be distinguished in parenting research**

The need to distinguish guilt and shame is especially clear in the measurement literature. Cheah et al. (2015) showed that psychologically controlling parenting among Chinese American mothers was better represented as multidimensional, with guilt induction, shaming, and love withdrawal showing important shared but also distinct variance. Likewise, Zhu et al. (2023), in a validation study with mainland Chinese adolescents, found that parental psychological control was not adequately captured by a single global construct; instead, their Chinese Parental Psychological Control Scale yielded three distinct though related dimensions: relational induction, harsh psychological control, and social comparison shame. Importantly, Zhu et al. also criticized earlier work for preassigning items to dimensions without sufficient validation, which is highly relevant for any study attempting to group parenting items into theoretically meaningful categories.

Taken together, this literature suggests two methodological implications. First, guilt-inducing and shame-inducing parental practices should not be assumed to be interchangeable merely because both are psychologically controlling. Second, even when a dataset was not originally designed to validate distinct latent scales, researchers can still make more defensible arguments by classifying items according to their dominant emotional appeal rather than collapsing them into one undifferentiated parenting construct. For the present study, that means it is theoretically stronger to distinguish guilt-oriented appeals, which emphasize wrongdoing, obligation, parental suffering, reciprocity, or conscience, from shame-oriented appeals, which emphasize embarrassment, humiliation, denigration, and public exposure.

### **1.4 Why this question matters in Chinese adolescent contexts**

This distinction is particularly important in Chinese contexts, where guilt induction, shaming, and related forms of psychological control have long been recognized as salient socialization practices. At the same time, the contemporary literature no longer supports the simple assumption that such practices are uniformly benign, uniformly harmful, or uniformly culturally endorsed. Fung & Lau (2012) found that different forms of parental psychological control carried different implications, and Zhu et al. (2023) likewise argued that some dimensions of psychological control may be more detrimental than others in Chinese settings. Thus, the relevant question is no longer whether guilt and shame “exist” in Chinese parenting, but how different forms of emotional induction may function differently for adolescents.

Adolescence is an especially important period in which to study these processes. Compared with younger children, adolescents are more sensitive to autonomy, dignity, identity, and peer evaluation, which means that the same parental tactic may be appraised very differently across developmental stages. Smetana et al. (2021) showed that Hong Kong Chinese youth judged act-focused guilt induction more favorably than parent-focused guilt, social comparison shaming, or denigration, and that early adolescents were more critical than younger children of the more shaming forms. This suggests that developmental period matters: parenting practices that may appear normatively acceptable in childhood may become more psychologically intrusive, less legitimate, or less effective in adolescence.

At the same time, the broader Chinese parenting literature remains mixed. Some work has linked guilt-oriented parental practices with empathy, prosociality, or relational sensitivity, especially in studies of younger children or in more act-focused and relationally embedded forms of induction. Other work, especially in the literature on psychological control, points toward greater risk for ill-being when parental tactics become denigrating, intrusive, or autonomy-thwarting (Barber, 1996; Fung & Lau, 2012; Zhu et al., 2023). This mixed record is precisely why guilt and shame should be studied not as a single cultural package, but as potentially different socialization practices with potentially different consequences.

### **1.5 Current study**

Against this background, the present study examines how guilt-oriented and shame-oriented parental induction appeals are associated with Chinese adolescents’ coping responses. The central issue is not whether parenting practices can be mapped onto a broader cultural vocabulary, but whether they evoke different emotional meanings and align with different behavioral tendencies. Accordingly, the present study treats parental appeals that emphasize wrongdoing, parental suffering, reciprocity, or conscience as guilt-oriented, and parental appeals that emphasize embarrassment, humiliation, public criticism, or social devaluation as shame-oriented. This reframing is more consistent with contemporary theory on self-conscious emotions and with the multidimensional literature

on parental psychological control, which has repeatedly shown that guilt induction, shaming, denigration, and other emotionally intrusive practices should not be treated as interchangeable (Cheah et al., 2015; Smetana et al., 2021; Zhu et al., 2023). Adolescents' coping responses are especially relevant because guilt is more likely to orient individuals toward repair when the problem is specific and repairable, whereas shame is more likely to orient them toward withdrawal or defensiveness when the self is experienced as exposed or degraded (Tangney et al., 2007; Tracy & Robins, 2006). On this basis, the study addresses two research questions:

**(1) To what extent are guilt-oriented and shame-oriented parental induction appeals associated with adolescents' endorsement of changing one's practices?**

**(2) To what extent are guilt-oriented and shame-oriented parental induction appeals associated with adolescents' endorsement of social avoidance?**

## 2. Methodology

### 2.1 Theoretical basis for categorizing parental induction appeals

The present study distinguishes between guilt-oriented and shame-oriented parental induction appeals. This distinction is grounded in the broader literature on self-conscious emotions, which consistently differentiates guilt from shame at the level of appraisal, subjective experience, and likely behavioral response. Guilt is generally associated with appraisals of responsibility for a specific wrongdoing, harm caused to others, or failure to meet an obligation, and is therefore more often linked to reparative or corrective tendencies (Tangney et al., 1996; Tangney et al., 2007). By contrast, shame is more often associated with negative self-evaluation, humiliation, embarrassment, and perceived devaluation by others, and is therefore more often linked to withdrawal, concealment, or defensive responses (Tracy & Robins, 2006; Miceli & Castelfranchi, 2018). From a cognitive appraisal perspective, these differences matter because adolescents' coping responses should vary depending on whether parental messages are interpreted primarily as reminders of wrongdoing and repairable responsibility or as threats to the self under conditions of exposure and social devaluation (Lazarus, 1991).

This distinction is also supported by the parenting literature. Research on Chinese and Chinese heritage families has shown that psychologically controlling tactics are not homogeneous. Fung & Lau (2012) distinguished relational induction from more hostile forms of psychological control, while Cheah et al. (2015) separated guilt induction from shaming and love withdrawal. More recently, Zhu et al. (2023) validated a multidimensional Chinese Parental Psychological Control Scale and showed that parental psychological control is better represented by distinct dimensions, including relational induction, harsh psychological control, and social comparison shame. Taken together, these studies suggest that parental emotional appeals should not be treated as interchangeable and that item grouping requires explicit conceptual justification. Accordingly, the present study classifies selected items according to their dominant emotional content rather

than treating them as a single undifferentiated form of parental induction.

In the present study, an item was classified as guilt-oriented when its wording primarily emphasized one or more of the following: responsibility for causing parental distress, wrongdoing, failure to reciprocate parental sacrifice, or conscience-based discomfort. An item was classified as shame-oriented when its wording primarily emphasized one or more of the following: embarrassment, humiliation, public criticism, denigration, or negative evaluation in front of others. This coding rule follows the broader theoretical contrast between guilt as more behavior- and obligation-focused and shame as more self- and image-focused (Tangney et al., 2007; Tracy & Robins, 2006). It also aligns with evidence that Chinese youth distinguish between more act-focused guilt induction and more denigrating or publicly shaming parental tactics (Smetana et al., 2021).

Importantly, the present study does not claim that the selected items form validated guilt and shame subscales. Rather, they are treated as theory-guided item classifications. This is consistent with Zhu et al.'s (2023) broader caution that psychologically controlling items should not be assigned to conceptual dimensions without clear justification.

### 2.2 Materials and variables

This study used secondary data from a publicly available dataset described by Chen et al. (2020) in their open data paper, "Data for Teenagers' Stressor, Mental Health, Coping Style, Social Support, Parenting Style and Self-efficacy in South China." The original data collection was approved and supported by the Projects of Philosophy and Social Sciences Research, Ministry of Education of China (No. 18YJC190013). A total of 3,784 high school students from 15 schools in Shenzhen, Guangdong Province, China, were recruited using random cluster sampling. The sample comprised 1,987 males and 1,797 females, with a mean age of 14.6 years.

Table 1 indicates the variables used in this study. Items 1-4 were classified as guilt-oriented. *PareFamilyDiscord* ("Parents always think that their unhappiness is caused by me") was classified as guilt-oriented because it attributes parental distress to the child's conduct and therefore centers responsibility for causing harm to significant others. *MaSaddened* ("If I do something wrong, my mother always makes me feel guilty or remorseful by looking sad") is also a guilt-oriented item because it explicitly references wrongdoing, maternal sadness, and the child's guilt or remorse. *MaUnpaid* ("Is this the reward we get for work hard all day for you?") was also classified as guilt-oriented because it emphasizes indebtedness, reciprocity, and the child's failure to repay parental sacrifice. *PaExpNotMet* ("If I don't do what my father expected, I will feel uneasy") was classified as guilt-oriented because it invokes conscience-based discomfort in response to failing to meet an obligation or expectation. Taken together, these items primarily direct attention to wrongdoing, responsibility, relational obligation, or conscience rather than to public degradation or embarrassment.

By contrast, Items 5-8 were classified as shame-oriented.

*PareOpenNag* (“When I was little, my parents used to beat me or scold me in front of others”) was classified as shame-oriented because the key feature of the item is public exposure before others, even though the item also contains a punitive element. *PaOpenPunish* (“My father talked excessively about what I said or did in front of others, which was very embarrassing”) is strongly shame-oriented because it explicitly centers embarrassment in front of others. *MaOpenCrit* (“My mother often criticizes me for being lazy and useless in front of others”) was classified as shame-oriented because it combines public criticism with denigration of the child’s character, which is more consistent with shame and harsh psychological control than with guilt. *PareSocialEmbar* (“My parents often treat me in a way that embarrasses me”) was likewise classified as shame-oriented because embarrassment, rather than remorse or conscience, is the dominant emotional signal. Taken together, these items emphasize humiliation, exposure, and negative evaluation under social visibility.

**Table 1.** Variable description.

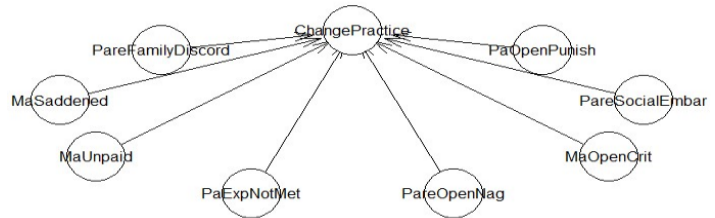
Variable number	Variable name	Description
1	PareFamilyDiscord	Parents always think that their unhappiness is caused by me.
2	MaSaddened	If I do something wrong, my mother always makes me feel guilty or remorseful by looking sad.
3	MaUnpaid	My mother often said to me something like, “Is this the reward we get for work hard all day for you?”
4	PaExpNotMet	If I don’t do what my father expected, I will feel uneasy.
5	PareOpenNag	When I was little, my parents used to beat me or scold me in front of others.
6	PaOpenPunish	My father talked excessively about what I said or did in front of others, which was very embarrassing.
7	MaOpenCrit	My mother often criticizes me for being lazy and useless in front of others.
8	PareSocialEmbar	My parents often treat me in a way that embarrasses me.
9	ChangePractice	Change some of the original practices or some of your own problems.
10	Avoidance	Avoid something, an occasion, or an activity because you are afraid.

### 2.3 Analytical method construction

For research objective 1, Model 1 was constructed with positive coping style *ChangePractice* being the outcome variable and various guilt and shame-based parenting as predicting variables. Model 1 was constructed as follows.

$$\begin{aligned} \text{ChangePractice} &\sim \text{normal}(\mu, \sigma) & (1.1) \\ \mu_i &= \beta_0 + \beta_{\text{PareFamilyDiscord}} * \text{PareFamilyDiscord}_i \\ &+ \beta_{\text{MaSaddened}} * \text{MaSaddened}_i + \beta_{\text{MaUnpaid}} * \text{MaUnpaid}_i \\ &+ \beta_{\text{PaExpNotMet}} * \text{PaExpNotMet}_i + \beta_{\text{PareOpenNag}} * \text{PareOpenNag}_i \\ &+ \beta_{\text{PaOpenPunish}} * \text{PaOpenPunish}_i + \beta_{\text{MaOpenCrit}} * \text{MaOpenCrit}_i \\ &+ \beta_{\text{PareSocialEmbar}} * \text{PareSocialEmbar}_i & (1.2) \\ \beta &\sim \text{normal}(M, S) & (1.3) \end{aligned}$$

Fig. 1 below shows the logic network of Model 1.

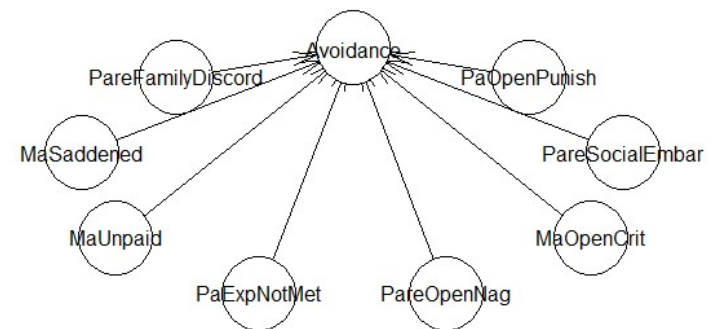


**Fig. 1.** Logical network of Model 1

Likewise, for research objective 2, Model 2 was constructed with negative coping style *Avoidance* being the outcome variable and various guilt and shame-based parenting variables. Model 2 was constructed as follows.

$$\begin{aligned} \text{Avoidance} &\sim \text{normal}(\mu, \sigma) & (1.1) \\ \mu_i &= \beta_0 + \beta_{\text{PareFamilyDiscord}} * \text{PareFamilyDiscord}_i \\ &+ \beta_{\text{MaSaddened}} * \text{MaSaddened}_i + \beta_{\text{MaUnpaid}} * \text{MaUnpaid}_i \\ &+ \beta_{\text{PaExpNotMet}} * \text{PaExpNotMet}_i + \beta_{\text{PareOpenNag}} * \text{PareOpenNag}_i \\ &+ \beta_{\text{PaOpenPunish}} * \text{PaOpenPunish}_i + \beta_{\text{MaOpenCrit}} * \text{MaOpenCrit}_i \\ &+ \beta_{\text{PareSocialEmbar}} * \text{PareSocialEmbar}_i & (1.2) \\ \beta &\sim \text{normal}(M, S) & (1.3) \end{aligned}$$

Fig. 2 below shows the logic network of Model 2.



**Fig. 2.** Logical network of Model 2

The probability around  $\mu$  is in the form of normal distribution, with standard deviation  $\sigma$ .  $\mu_i$  represents participant  $i$ 's coping. *PareFamilyDiscord<sub>i</sub>* refers to participant  $i$ 's perceived parental guilt induction based on causing family discord. *MaSaddened<sub>i</sub>* refers to participant  $i$ 's perception of guilt induction through mother’s sadness. *MaUnpaid<sub>i</sub>* refers to participant  $i$ 's perception of mother inducing guilt through

children’s inability to properly payback mother’s nurturing efforts.  $PaExpNotMet_i$  refers to perceived father’s guilt tactic through not being able to meet father’s expectation.  $PareOpenNag_i$  indicates participant  $i$ ’s experience of shame through nagging in front of others for participants rhetoric or acts.

$PaOpenPunish_i$  is participants’ experience of being shamed when father talking excessively of adolescents’ embarrassment in front of others.  $MaOpenCrit_i$  refers to shame through openly criticizing children in front of others. Lastly,  $PareSocialEmbar_i$  represents the embarrassment and shame that parents induced in social settings.

Model 1 and 2 have an intercept  $\beta_0$  and coefficients  $\beta_{PareFamilyDiscord}$ ,  $\beta_{MaSaddened}$ ,  $\beta_{MaUnpaid}$ ,  $\beta_{PaExpNotMet}$ ,  $\beta_{PareOpenNag}$ ,  $\beta_{PaOpenPunish}$ ,  $\beta_{MaOpenCrit}$ ,  $\beta_{PareSocialEmbar}$ . Regarding the coefficients, the probability around  $M$  is in the form of a normal distribution with standard deviation  $S$ .

### 2.4 Analysis and validation

This study employed Bayesian analysis using the Markov Chain Monte Carlo (MCMC) method (Nguyen et al., 2022; Vuong et al., 2022), with auxiliary MCMC algorithms (Nguyen et al., 2005; Van Huu & Hoang, 2007) enhancing predictive power and accuracy. Bayesian inference treats all properties—including unknown parameters—probabilistically, facilitating parsimonious model construction (Csilléry et al., 2010; Dunson, 2001; Gill, 2014). Instead of relying on p-values for binary decisions on hypothesis rejection or acceptance, the Bayesian approach interprets results using the highest probability of parameters and credible intervals (Wagenmakers et al., 2018).

To evaluate the alignment between data simulated through Markov Chain Monte Carlo (MCMC) methods and the original observed data, we applied Pareto-smoothed importance sampling leave-one-out (PSIS-LOO) diagnostics. This technique assesses the model’s goodness of fit (Vehtari et al., 2017; Vehtari & Gabry, 2019). The LOO is calculated as follows.

$$LOO = -2LPPSD_{loo} = -2 \sum_{i=1}^n \log \int p(y_i|\theta) p_{post(-i)}(\theta) d\theta$$

The “LOO” package in R uses k-Pareto values for leave-one-out cross-validation. A k-value below 0.5 indicates a strong fit between the model and observed data, while a k-value above 0.7 suggests potential estimation inaccuracy. Chain convergence is assessed using the Gelman-Rubin shrink factor (Rhat) and effective sample size ( $n_{eff}$ ). Good convergence is achieved when  $n_{eff}$  exceeds 1000 and Rhat equals 1.

All analyses were conducted using the bayesvl package in R (La & Vuong, 2019). To reduce subjective influences in estimation, uninformative priors were applied. The MCMC setup consisted of 5,000 iterations, including 2,000 warm-up iterations, with four chains.

## 3. Results

### 3.1 Model 1: Positive coping style associated with guilt and shame

PSIS diagnosis shows that all k values for Model 1 are below the 0.5 threshold (see Fig. 3), indicating that the simulated data fit well with the original data.

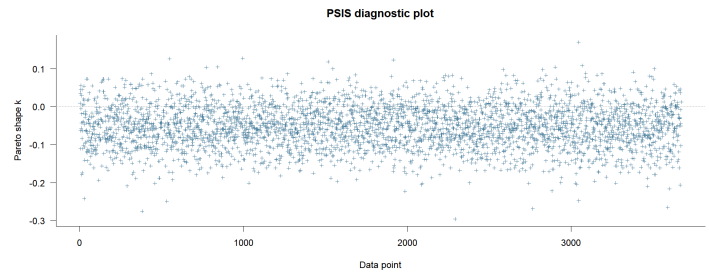


Fig. 3. PSIS diagnosis result of Model 1

The results for Model 1 are presented in Table 2. All parameters show effective sample sizes ( $n_{eff}$ ) exceeding 1000 and Rhat values equal to 1, suggesting that the Markov chains have converged. This is further supported by the trace plots (Fig. 4), which display stable patterns without noticeable departures from equilibrium across all parameters.

Table 2. Model 1’s simulated posteriors

Parameters	Mean	Standard deviation	$n_{eff}$	Rhat
Constant	1.39	0.06	12916	1
PareFamilyDiscord	0.01	0.02	15052	1
MaSaddened	0.00	0.02	15469	1
MaUnpaid	-0.01	0.02	16986	1
PaExpNotMet	0.10	0.02	13294	1
PareOpenNag	0.00	0.02	15079	1
MaOpenCrit	-0.05	0.02	16892	1
PareSocialEmbar	0.01	0.02	15222	1
PaOpenPunish	-0.01	0.02	15915	1

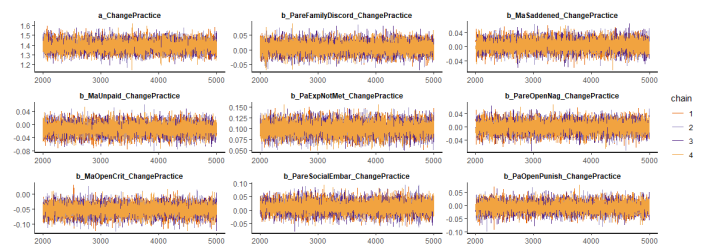


Fig. 4. Trace plots for Model 1

Model 1’s posterior distributions of coefficients can be visualized on interval plots (see Fig. 5). Among guilt-related guilt inductions, only  $PaExpNotMet$  has a clear positive influence on outcome variable  $ChangePractice$ . On the other

hand, in shame-based parentings, *MaOpenCrit* has a clear negative influence on the formation of *ChangePractice*. The rest shaming tactics that do not show a clear positive or negative association with *ChangePractice* involve *PareFamilyDiscord*, *MaSaddened*, *MaUnpaid*, *PareOpenNag*, *PareSocialEmbar*, and *PaOpenPunish*.

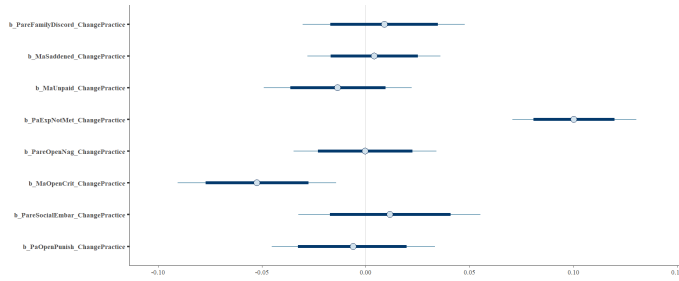


Fig. 5. Model 1's posterior distributions

### 3.2 Model 2: Negative coping style associated with guilt and shame

PSIS diagnosis indicates that *k* values for Model 2 are under the 0.5 threshold as indicated in Fig. 6.

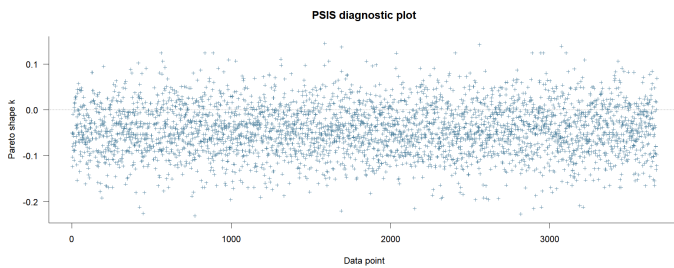


Fig. 6. PSIS diagnosis result of Model 2

Model 2's analysis is displayed in Table 3. All parameters' *n\_eff* values are above 1000 and the values of *Rhat* equals to 1. The trace plots for Model 2 (see Fig. 7) also suggest good convergence of the Markov chains.

Table 3. Model 2's simulated posteriors

Parameters	Mean	Standard deviation	<i>n_eff</i>	<i>Rhat</i>
Constant	-0.20	0.07	11414	1
PareFamilyDiscord	0.07	0.02	14350	1
MaSaddened	0.10	0.02	15462	1
MaUnpaid	0.06	0.02	16273	1
PaExpNotMet	0.09	0.02	12207	1
PareOpenNag	0.08	0.02	14441	1
MaOpenCrit	0.05	0.02	14386	1
PareSocialEmbar	0.03	0.03	15118	1
PaOpenPunish	0.02	0.02	16787	1

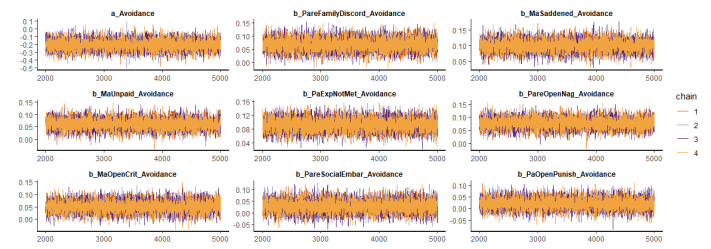


Fig. 7. Trace plots for Model 2

Model 2 coefficients' posterior distributions are visualized on interval plots (see Fig. 8). All guilt and shame-based parenting except *PareSocialEmbar* and *PaOpenPunish* have clear positive associations with outcome variable Avoidance. *PareSocialEmbar* and *PaOpenPunish* have a moderate reliable association with children's social avoidance propensity. Also, guilt-based parenting in general have a greater impact on children's social avoidance tendency as compared to shame-oriented ones except *PareOpenNag*.

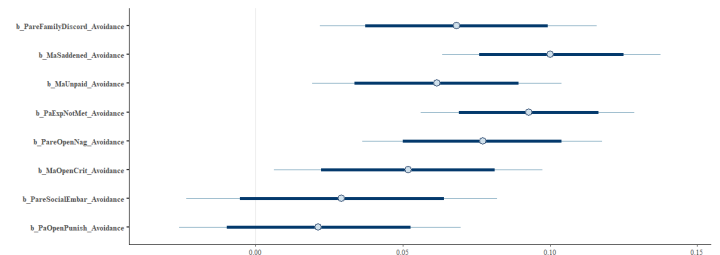


Fig. 8. Model 2's posterior distributions

## 4. Discussion

### 4.1 Overall pattern: parental emotional appeals were linked more to avoidance than to constructive change

The central pattern in this study is that parental emotional appeals were much more consistently associated with avoidance than with constructive behavioral change. Only the more specific, obligation-based, and potentially repairable form of parental pressure aligned with positive change, whereas a much wider range of guilt- and shame-oriented appeals aligned with social avoidance. This pattern fits the broader literature showing that self-conscious emotions are not uniformly adaptive. Guilt can support repair when it is tied to a specific wrong, but shame is more likely to elicit withdrawal when the adolescent experiences the message as exposing, degrading, or difficult to resolve (Tangney et al., 1996; Tangney et al., 2007; Tracy & Robins, 2006; Miceli & Castelfranchi, 2018). It also aligns with classic work on psychological control, which argues that parental tactics that intrude on children's emotional life often constrain rather than facilitate healthy self-regulation (Barber, 1996).

## **4.2 Why specific guilt may still support behavioral correction**

The one part of the pattern that looks potentially constructive is the form of parental appeal centered on a clear unmet expectation or obligation. This kind of message remains emotionally demanding, but it also remains behaviorally legible: the adolescent can identify what standard was not met and can imagine a route toward correction. That is important because guilt tends to be more adaptive when it is linked to a specific, reparable act rather than to a diffuse sense of being a burden or disappointment (Tangney et al., 2007). In this sense, the findings suggest that not all guilt-oriented parenting practices are equal. Appeals that communicate “you failed to meet a clear expectation” may still leave room for repair, whereas appeals that communicate “you caused our suffering” or “you owe us for our sacrifice” may create emotional burden without a similarly clear pathway to resolution. Research distinguishing relational induction from more intrusive forms of psychological control is useful here, because it shows that parental pressure can vary in both tone and developmental consequence (Fung & Lau, 2012).

## **4.3 Why shame-oriented appeals are more likely to undermine positive coping**

By contrast, the findings suggest that shame-oriented parental practices, especially those involving public criticism, embarrassment, or denigration, are poorly suited to fostering constructive change. Shame differs from guilt because it shifts the adolescent’s attention away from a changeable act and toward the exposed or devalued self (Tracy & Robins, 2006). Once the message is experienced as “I am inadequate” rather than “I did something wrong,” defensive coping becomes more likely than calm self-correction. This interpretation is strongly supported by prior work with Chinese youth. Smetana et al. (2021) found that Hong Kong Chinese children and adolescents viewed act-focused guilt induction as more appropriate and effective than parent-focused guilt, social comparison shaming, and denigration, with the more shame-laden forms evaluated less positively overall. Likewise, Zhu et al. (2023) showed that Chinese parental psychological control is multidimensional and that shame-related and harsh-control forms should be distinguished from more relationally framed induction. Taken together, these studies suggest that public or self-devaluing parental tactics are not simply “stronger” forms of guilt induction; they are psychologically different practices, and the present results are consistent with that distinction.

## **4.4 A contemporary Chinese context: individualization without the disappearance of family obligation**

The broader Chinese social context also helps explain why the results are mixed rather than uniformly negative. China’s social transformation has involved a significant rise in individual agency and self-development, a process Yan (2010) describes as the individualization of Chinese society. At the same time, more recent work argues that China has not

moved toward simple atomization; instead, family obligation remains highly salient in what Yan (2025) calls neo-familism, an adaptive reworking of familism under new emotional and socioeconomic conditions. This means that many adolescents are likely growing up in a context where autonomy has become more important, yet family duty has by no means disappeared. Under such conditions, parental appeals based on obligation may still retain moral force, but they may no longer produce straightforward compliance. Instead, adolescents may recognize the legitimacy of family expectations while nonetheless reacting defensively to emotionally burdensome or humiliating delivery.

This interpretation is also consistent with newer work on filial norms and family obligation among Chinese adolescents. Family obligation remains developmentally meaningful and can function as a cultural strength, but its effects depend heavily on the relational context in which it is transmitted (Yang et al., 2024). Similarly, longitudinal evidence suggests that parenting style matters for filial orientations: more supportive parenting predicts more reciprocal filiality, whereas more authoritarian parenting is less conducive to it, especially in urban settings where autonomy concerns are more salient (Lin & Wang, 2022). In that sense, the present findings do not imply that obligation-based parenting is obsolete. Rather, they suggest that obligation may support constructive coping only when it is communicated in ways that remain specific, bounded, and respectful, rather than through diffuse guilt, humiliation, or character-level attack.

## **4.5 Implications for theory and practice**

Theoretically, the study contributes by showing that parental emotional appeals are better understood as different psychological pathways rather than as a single culturally coherent practice. The key distinction is not simply whether parents are emotionally demanding, but whether the adolescent experiences the message as a reparable moral demand or as an assault on the self under social exposure. That distinction helps integrate the current findings with both self-conscious emotion theory and the multidimensional literature on psychological control (Barber, 1996; Zhu et al., 2023).

Practically, the findings suggest that parents and educators should be cautious about assuming that stronger emotional pressure yields stronger moral correction. If the goal is constructive change, messages that are specific, behavior-focused, and reparable are likely to be more effective than those that burden adolescents with parental suffering or expose them to humiliation. Shame-laden tactics may secure short-term submission in some cases, but the present evidence suggests they are more likely to foster avoidance than reflective self-correction.

## **4.6 Limitations**

These interpretations should be made cautiously. The study uses cross-sectional secondary data, so it cannot establish causal direction. In addition, the guilt-oriented and shame-oriented categories are theory-guided item classifications, not validated latent subscales. That limitation matters, but it does

not erase the value of the current pattern. At minimum, the results suggest that parental emotional appeals differ in meaningful ways and should not be treated as interchangeable in future research. A useful next step would be to test these distinctions with measures specifically designed to separate guilt induction, denigration, embarrassment, and broader forms of psychological control in adolescent samples (Zhu et al., 2023).

## Declarations

## Ethics approval and consent to participate

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## Consent for publication

All authors read and approved the final version of the manuscript for publication.

## Availability of data and materials

The dataset used in this study can be accessed at <https://plu.mx/plum/a/?doi=10.1016/j.dib.2020.105202>

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## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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